In the Claims:

Please amend the claims as shown in the following listing of claims, which will replace all prior versions and listings of claims in the application.

1. (Previously presented) An electrode for implant into live-tissue, comprising:

a first layer having first and second portions, wherein the first portion comprises stiff material and forms a tip of the electrode and the second portion is disposed adjacent to the first portion and comprises flexible material;

a second layer comprising flexible material and disposed over the first layer; and

a third layer comprising flexible material and disposed over the second layer.

2. (Previously presented) The electrode of claim 1 wherein the first layer further includes a third portion disposed adjacent to the second portion and comprising stiff material.

3. (Previously presented) The electrode of claim 2 wherein the second portion of the first layer includes a first beveled edge between the first portion and second portion and a second beveled edge between the second portion and the third portion.

4. (Previously presented) The electrode of claim 1 further including a conductor disposed between the second layer and the third layer.

5. (Currently amended) The electrode of claim 1 further including a ~~recording~~ sensing site disposed in the third layer that senses electrical signals.

6. (Currently amended) The electrode of claim 5 wherein the ~~recording site includes a transducer to convert physical phenomenon to an electrical signal~~ electrical signals are generated by physical phenomenon occurring in the live tissue.

7. (Previously presented) The electrode of claim 1 wherein the second portion of the first layer provides flexibility to allow movement of an end of the electrode opposite the tip end without substantial movement in the tip end of the electrode.

8. (Previously presented) The electrode of claim 1 wherein the flexible material includes benzocyclobutene.

9. (Previously presented) An electrode for implant into live tissue, comprising:

a first layer having first and second portions, wherein the first portion comprises stiff material and forms a tip of the electrode and the second portion is disposed adjacent to the first portion and comprises flexible material; and

a second layer comprising flexible material and disposed over the first layer.

10. (Previously presented) The electrode of claim 9 wherein the stiff material includes silicon.

11. (Previously presented) The electrode of claim 9 wherein the second portion of the first layer provides flexibility to allow movement of an end of the electrode opposite the tip end without substantial movement in the tip end of the electrode.

12. (Previously presented) The electrode of claim 9 wherein the flexible material includes benzocyclobutene.

13. (Previously presented) The electrode of claim 9 further including a third layer comprising flexible material and disposed over the second layer.

14. (Currently Amended) The electrode of claim 13 further including a ~~recording~~ sensing site disposed in the third layer.

15. (Previously presented) The electrode of claim 9 wherein the first layer further includes a third portion disposed adjacent to the second portion and comprising stiff material.

16. (Previously presented) The electrode of claim 15 wherein the second portion of the first layer includes a first beveled edge between the first portion and second portion and a second beveled edge between the second portion and the third portion.

17. (Previously presented) An electrode for implant into live tissue, comprising:

a body; and

first and second prongs extending from the body, where each prong includes, (a) a first layer having first and second portions, wherein the first portion comprises stiff material and forms a tip of the prong and the second portion is disposed adjacent to the first portion and comprises flexible material, and (b) a second layer comprising flexible material and disposed over the first layer.

18. (Previously presented) The electrode of claim 17 wherein the stiff material includes silicon.

19. (Previously presented) The electrode of claim 17 wherein the second portion of the first layer provides flexibility to allow movement of the body without substantial movement in the tip end of the prong.

20. (Previously presented) The electrode of claim 17 wherein the flexible material includes benzocyclobutene.

21. (Previously presented) A method of manufacturing an electrode for implant into live tissue, comprising:

forming a first layer having first and second portions, wherein the first portion comprises stiff material and forms a tip of the electrode and the second portion is disposed adjacent to the first portion and comprises flexible material; and

forming a second layer comprising flexible material and disposed over the first layer.

22. (Previously presented) The method of claim 21 further including the step of forming a third layer comprising flexible material and disposed over the second layer.

23. (Previously presented) The method of claim 21 further including the step of forming a third portion disposed adjacent to the second portion and comprising stiff material.

24. (Previously presented) The method of claim 23 wherein the second portion of the first layer includes a first beveled edge between the first portion and second portion and a second beveled edge between the second portion and the third portion.

25. (Currently amended) The ~~electrode~~ method of claim 21 wherein the stiff material includes silicon.

26. (Currently amended) The ~~electrode~~ method of claim 21 wherein the flexible material includes benzocyclobutene.

27. (New) A probe to be inserted into brain tissue of an animal species comprising a penetrating end and a distal end, wherein the probe is stiff from about the penetrating end to about the length of probe insertion into brain tissue of the animal species, and wherein the probe is flexible at least about the extent of the spacing between brain tissue and skull of the animal species.

28. (New) The probe of claim 27 wherein the length of the stiff portion of the probe varies for use with different species.

29. (New) The probe of claim 27 wherein at least part of the stiff portion of the probe comprises a stiff layer coupled to a flexible layer.

30. (New) The probe of claim 29 wherein the distal end of the stiff layer is beveled.

31. (New) The probe of claim 29 further including a conductor coupled to the flexible layer.

32. (New) The probe of claim 31 wherein a sensing site is coupled to the conductor.

33. (New) The probe of claim 32 wherein the sensing site senses electrical signals generated by physical phenomenon occurring in live tissue.

34. (New) The probe of claim 27 wherein the portion of the probe that is flexible comprises benzocyclobutene.

35. (New) The probe of claim 27 wherein the portion of the probe that is stiff comprises silicon.

36. (New) The probe of claim 29 wherein the flexible layer comprises a first flexible layer coupled to a second flexible layer.

37. (New) The probe of claim 36 further including a sensing site coupled to the second flexible layer.

38. (New) A probe for implant into live tissue, comprising a plurality of prongs, wherein each prong includes a penetrating end and a distal end, wherein the prongs are stiff from about the penetrating end to about the length of insertion into brain tissue, and the prongs are flexible at least about the extent of the spacing between brain tissue and skull.

39. (New) The probe of claim 38 wherein the portion of the prongs that is stiff comprise silicon.

40. (New) The probe of claim 38 wherein the portion of the prongs that is flexible comprise benzocyclobutene.

41. (New) A method of manufacturing a probe for implant into brain tissue of a particular species, comprising:

determining the approximate insertion depth of the probe into brain tissue;

determining the approximate amount of space between brain tissue and skull; and

forming a probe having a penetrating end and a distal ends; wherein the probe is stiff from about the penetrating end to about the length of probe insertion into brain tissue of the species, and the probe is flexible at least about the extent of the spacing between brain tissue and skull of the species.

42. (New) The method of claim 41 wherein the probe is further formed to be stiff for at least a portion of the length extending distally from about the skull to the distal end of the probe.

43. (New) The method of claim 41 wherein the probe is further formed such that the stiff portion interfaces with the flexible portion at an angle.

44. (New) The method of claim 42, wherein the probe is further formed such that the flexible portion interfaces with the stiff portions on either side at an angle.

45. (New) The method of claim 41 wherein the stiff portion of the probe is formed of at least silicon.

46. (New) The method of claim 41 wherein the flexible portion of the probe is formed of at least benzocyclobutene.

47. (New) A method of probing brain tissue comprising:
inserting a probe with a stiff penetrating end through a skull into brain tissue;
wherein the penetrating end is stiff from about the penetrating tip to about the point of the probe corresponding to the inserted depth of the probe into brain tissue; and
aligning a flexible portion of the probe to extend across a gap between the brain tissue and the skull.

48. (New) The method of claim 47, wherein the penetrating end of the probe includes a sensing site coupled to a conductor that receives a signal from the brain and communicates the signal via the conductor.